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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/664,382	09/17/2003	Kouji Sasano	CU-3361	4420

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LADAS & PARRY LLP
224 SOUTH MICHIGAN AVENUE
SUITE 1200
CHICAGO, IL 60604

EXAMINER

GIBSON, ERIC M

ART UNIT	PAPER NUMBER
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3661

DATE MAILED: 02/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/664,382

Applicant(s)

SASANO, KOUJI

Examiner

Eric M Gibson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Endo et al. (US006289278B1).

a. Per claim 1, Endo teaches a light source which irradiates a light to a target position while traveling (101, figure 1), a GPS receiver (209, figure 8) with an inherent antenna for functionality, and a data storing unit which stores measurement data in a storage medium (column 11, lines 51-52).

b. Per claim 2, Endo further teaches a position correction unit (column 11, lines 39). Alternatively, DGPS receivers are common and well-known alternatives in the art for position correction.

c. Per claim 3, Endo further teaches a display device (115, figure 8) which displays map data in a neighborhood of a current position of the vehicle (column 10, lines 20-25), and a measurement position display unit which displays a measurement position on the display device (column 7, lines 46-50).

d. Per claim 4, Endo teaches that the GPS measurement data is associated with a place name (column 9, lines 23-33).

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2. Claim 6 is rejected under 35 U.S.C. 102(b) as being anticipated by Shirai (US006018308A).

a. Per claim 6, Shirai teaches a light source which irradiates light to a top of a target object while traveling (column 4, lines 25-32), a screen which displays a position of the irradiated light (15, figure 1), an angle calculation unit which detects an emission angle of the light (column 4, lines 65-67), and a calculation unit which calculates the height of the object based on the angle and distance between the vehicle and the object (column 6, lines 46-65).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Endo in view of Breed et al. (US006526352B1).

a. Per claim 5, Endo teaches the invention as explained in the rejection of claim 1. Endo further teaches an image capturing device (102, figure 1). Endo does not teach associating the GPS measurement data with the image data. Breed teaches a method and arrangement for mapping a road that includes associating the image data with the GPS measurements as a part of the mapping process (see claim 29). It would have been obvious to one of ordinary skill in the art, at the time of invention, to include

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the GPS measurement data with the images, in order to form a map database, as taught by Breed.

4. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shirai in view of Breed.

a. Per claim 7, Shirai teaches the invention as explained in the rejection of claim 6. Shirai further teaches storing height data of objects in order to improve image recognition (column 10, lines 40-47). Shirai does not teach a GPS receiver. However, GPS receivers are well-known in the vehicle navigation art. One such example is Breed. Breed teaches a method and arrangement for mapping a road that includes associating data with the GPS measurements as a part of the mapping process (see claim 29). It would have been obvious to one of ordinary skill in the art, at the time of invention, to include the GPS measurement data, in order to form a map database, as taught by Breed.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Shirai et al. (US20010026238A1) teaches an obstacle recognition system for a vehicle. Takenaga et al. (US006191701B1) teaches a run environment recognizing apparatus. Kitahara et al. (US006073078A) teaches a vehicle with millimeter wave radar. Lemelson et al. (US005983161A) teaches a GPS vehicle collision avoidance warning and control system and method. Satonaka (US005929785A) teaches a control device for a vehicle. Nishida et al. (US005475494A) teaches a driving environment surveillance apparatus. Karasudani

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(US005369590A) teaches an inter-vehicle distance detecting device. Endo

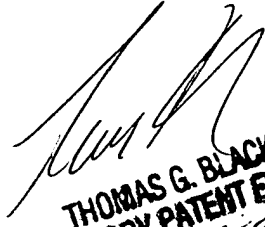
(US004477184A) teaches an obstacle detection system for use in vehicles.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric M Gibson whose telephone number is (703) 306-4545. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black can be reached on (703) 305-8233. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

EMG


THOMAS G. BLACK
SUPERVISORY PATENT EXAMINER
GROUP 3600